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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,263	11/21/2003	Edward Paul Carlin	9435	2795

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EXAMINER

CHAPMAN, GINGER T

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,263

Applicant(s)

CARLIN, EDWARD PAUL

Examiner

Ginger T Chapman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>25 March 2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Drawings***

The drawings are objected to because 37 CFR 1.84 (l) requires that all drawings must be made by a process which will give them satisfactory reproduction characteristics. Every line, number, and letter must be durable, clean, black, sufficiently dense and dark and uniformly thick and well-defined. The use of shading in views is encouraged under 37 CFR 1.84(m) if it aids in understanding the invention and if it does not reduce legibility. Shading is used to indicate the surface or shape of spherical, cylindrical, and conical elements of an object. Flat parts may also be lightly shaded.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

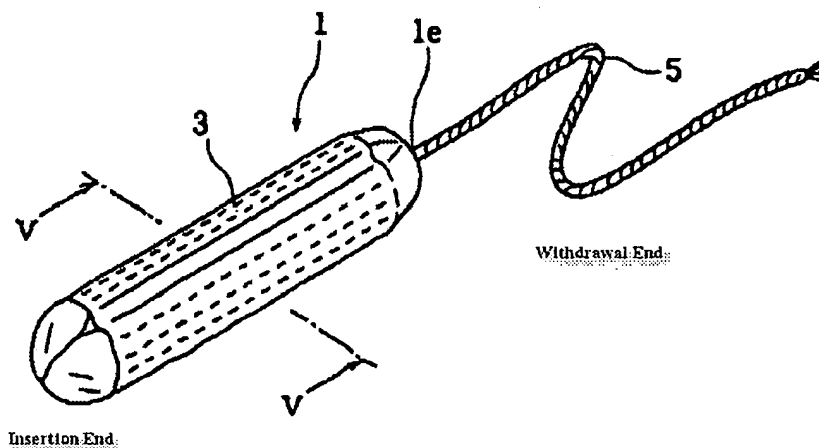
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Wada (EP 1064901 A2).

Claim 1: As seen in Figures 2, 3 and 6, Wada discloses a tampon (1) for feminine hygiene comprising an insertion end (see fig. 2, *infra*), a withdrawal end (fig. 2), a center region (fig. 2), a longitudinal axis (fig. 2), and an outer surface (page 2, line 43); said tampon being composed of compressed fibrous material (page 4, line 3); wherein said outer surface of said tampon comprises a plurality of recessed portions (figs. 3 and 6: (3)); each of said recessed portions comprising a length dimension and a width dimension (figs. 3 and 6); wherein said width dimension varies as measured along said length dimension (page 4, lines 24-27). See below, Figure 2 from EP 1064901 A2:

Fig. 2

Claim 7: Wada discloses the recessed portions are evenly spaced (figs. 3 and 6).

Claim 8: Wada discloses the fibrous material of the tampon has an essentially uniform density over a cross-section of the tampon (page 6, lines 6-12; fig. 6).

Claim 9: Wada discloses the fibrous material of said tampon has varying density over a cross-section of the tampon (page 3, lines 4-5; page 5, lines 3-4).

Claim 10: Wada discloses wherein the tampon further comprises a core which is highly compressed (page 4, line 55 and lines 12-14).

Claim 11: Wada discloses wherein the withdrawal end further comprises a withdrawal member (fig. 2 (5); page 5, line 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada in view of Schoelling (2001/0014348).

Claim 2: Wada discloses the tampon having a plurality of recessed portions. Wada does not disclose wherein the largest width dimension of the recessed portions is located in the insertion end. Schoelling, at page 1, [0003], expresses the desire for a tampon having controllable absorbency and controllable expandability based upon its structure without additional manufacturing expenses and costs.

Schoelling teaches that recessed portions in the surface of the tampon increase surface area available for fluid imbibition thus improving absorbency and additionally reducing bypass

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leakage as the tampon swells and blocks the vaginal canal. Schoelling further teaches that the choice of size and position of the holes provides for diversification of the absorption velocity of the fluid and additionally for absorption capacity (p. 2, [0020], ll. 6-8) and differential expansion of the tampon (p1, [0014], ll. 9-12) and thus discloses the desirability of such.

In particular, Schoelling teaches the largest width dimension of the recessed portions located in the insertion end (p.2, [0022] ll. 8-12). Schoelling teaches that the benefit of having the largest width dimension of the recessed portions in the insertion end is that the expansion of the withdrawal end is restricted so that when the tampon is withdrawn from the body cavity the diameter of the withdrawal end is reduced thereby facilitating ease of withdrawal for the user while maintaining blocking the vaginal canal by expanding at the insertion end for protection against bypass leakage. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the recessed portions of Wada having largest width dimension located in the insertion end in order to provide a more comfortable tampon with reduced bypass leakage.

Claim 3: Wada discloses the tampon having a plurality of recessed portions. Wada does not disclose wherein the largest width dimension of the recessed portions is located in the withdrawal end. Schoelling, at page 1, [0017], ll. 8-10, expresses the desire for optimal diversification of the absorption velocity and capacity over the length of the tampon. As seen in Figure 1, Schoelling teaches the recessed portions wherein the largest width dimension is located in the withdrawal end (p.1, [0017]). Schoelling teaches that the benefit of having the largest width dimension located in the withdrawal end is that fluid applied to the tampon is led in the direction of the withdrawal end [0018] thereby enhancing absorbency in the longitudinal direction and increasing absorption velocity due to the increase in surface area toward the withdrawal end while still preventing bypass leakage while also maintaining blocking the vaginal canal for protection against bypass leakage at the withdrawal end. In view of this known teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the recessed portions of Wada having largest width dimension located in the withdrawal end in order to provide a tampon that enhances the full utilization of the absorbent material of the tampon thus providing leakage prevention and bypass prevention and promoting economic efficiency for the user and the desirability of such by Schoelling.

Claim 4: Wada discloses the tampon having a plurality of recessed portions. Wada does not disclose wherein the smallest width dimension is located in said center region. Schoelling, at [0023], ll. 7-8, teaches that the number and size of the perforations lead to a different shape of the tampon when expanded such that the introduction and withdrawal of the tampon into and from the vaginal cavity can be facilitated. Schoelling further teaches at [0026] that combining both modifications, i.e., larger width dimensions located at both the insertion end and at the withdrawal end combine the benefits of both modifications (see claims 2 and 3, *supra*) in one tampon which expands into a serpentine shape resulting in a tampon enhancing the full utilization of the absorbent material in the longitudinal direction thereby providing leakage protection and promoting economic efficiency (see claim 3, *supra*) and having comfortable ease of insertion/removal and bypass leakage prevention for the user (see claim 2, *supra*).

Thus, inevitable and necessarily the smallest width dimension would be located in the center region in order to provide a structure wherein the largest width dimensions are located in the ends. Applying the teachings of Schoelling, uniform dimensions along the length of the tampon cause uniform expansion along the length resulting in the conventional uniform cylindrical shape of conventional tampons without the desired expandability at the ends benefits. Wider dimensions at the center cause expansion at the center resulting in a spherical shape without the desired benefits of fluid velocity/absorption along the length of the tampon.

In view of the teachings of Schoelling, to form the recessed portions of Wada having smallest width dimension located in the center region as an inevitable and necessary corollary to largest width dimensions located in the end regions as taught by Schoelling, would have been obvious to one having ordinary skill in the art at the time the invention was made in order to form a tampon having fluid velocity along the length of the tampon and controlled expandability at the ends of the tampon thereby providing a cleaner and comfortable tampon for the user.

Claim 5: Wada discloses the tampon having a plurality of recessed portions. Wada does not disclose wherein the width dimension varies continuously as measured along the length dimension. As seen in Figure 1, Schoelling teaches the width dimension varying continuously as measured along the length dimension. In particular, Schoelling, at page 1, [0017], line 2, teaches the width dimension uniformly increases over the length of the tampon for optimal diversification of the absorptive velocity and capacity over the length of the tampon (p. 1, [0015], ll. 9-10) and thus discloses a desire for such. Therefore, to form the recesses of Wada having continuously varying width dimension as taught by Schoelling would have been obvious to one having ordinary skill in the art at the time the invention was made, since Schoelling states at page 2, [0023] that such a modification allows the characteristics such as absorbency and expandability and the structure and shape of the tampon to be chosen in such a manner to avoid additional manufacturing costs while providing a comfortable tampon with reduced leakage for the user.

Claim 6: Wada discloses the tampon having a plurality of recessed portions. Wada does not disclose wherein the width dimension varies intermittently as measured along the length dimension. As seen in Figure 1, Schoelling teaches the width dimension varying intermittently as measured along the length dimension. Schoelling, at page 1, [0015], line 4 and at [0016] teaches non-uniform and various dimensions and at page 2, [0019] teaches different geometrical configurations varying intermittently in order to vary the size of the openings of the recessed portions in order to direct fluid flow and absorption velocity along the surface of the tampon and to control expandability at the ends of the tampon. Therefore, to form the recesses of Wada having intermittently varying width dimension as taught by Schoelling would have been obvious to one having ordinary skill in the art at the time the invention was made, since Schoelling states at page 2, [0023] that such a modification allows the characteristics such as absorbency and expandability and the structure and shape of the tampon to be chosen in such a manner to avoid additional manufacturing costs while providing a comfortable tampon with reduced leakage for the user.

With respect to the limitations of width dimensions, Applicant's specification, at page 6 lines 21-32 and page 7, lines 7-15 states dimensions of the recesses may be varied according to mutually exclusive alternate embodiments; however applicant has provided no criticality for the width dimensions. The specification contains no disclosure of either the critical nature of the claim limitations nor any unexpected results arising therefrom, and that as such the limitations were arbitrary and therefore obvious. Such unsupported limitations cannot be the basis for patentability, since where patentability is said to be based upon particular dimensions or another variable in the claim, the applicant must show that the chosen variables are critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ 2d 1934 (Fed. Cir. 1990). One having ordinary skill in the art would be able to determine the ideal dimensions for the particular recessed portions.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wada in view of Child et al (US 6,283,952).

Claim 12: Wada discloses the tampon having a plurality of recessed portions. Wada does not expressly disclose the withdrawal end having a finger indent. As seen in Figure 2, Child et al teach a finger indent. Child et al, at column 1, line 59-60 express the desire to provide a finger indent for the user to manually insert the digital tampon thereby providing ease of insertion. Therefore, to form a finger indent as taught by Child in the tampon of Wada in order to provide a digital tampon permitting the user ease of manual insertion of the tampon thereby providing a more comfortable tampon would have been obvious to one having ordinary skill in the art, since Child states at column 2, lines 34-36 that such a finger indent permits the user to apply a force necessary to insert the tampon.

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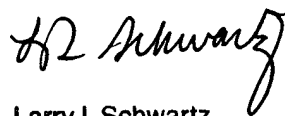
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (571) 272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ginger Chapman
Examiner, Art Unit 3761
5/24/05



Larry I. Schwartz
Supervisory Patent Examiner
Group 3700